## Correct driving posture

## Drive with a good posture as follows:



- 11 Sit upright and well back in the seat.
- Adjust the position of the seat forward or backward to ensure the pedals can be reached and easily depressed to the extent required. (—)P. 34)
- Adjust the seatback so that the controls are easily operable.
- Adjust the tilt and telescopic positions of the steering wheel downward so the airbag is facing your chest. (→P. 48)
- Lock the head restraint in place with the center of the head restraint closest to the top of your ears. (→P. 40)
- Mear the seat belt correctly. (→P.42)

#### n Caution while driving

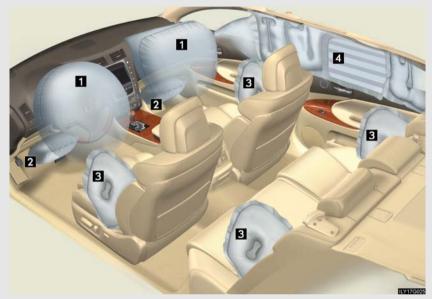
- 1 Do not adjust the position of the driver's seat. Doing so could cause the driver to lose control of the vehicle.
- 1 Do not place a cushion between the driver or passenger and the seatback. A cushion may prevent correct posture from being achieved, and reduce the effectiveness of the seat belt and head restraint, increasing the risk of death or serious injury to the driver or passenger.
- 1 Do not place anything under the front seats. Objects placed under the front seats may become jammed in the seat tracks and stop the seat from locking in place. This may lead to an accident. The adjustment mechanism may also be damaged.

#### n Adjusting the seat position

- 1 Do not recline the seat more than necessary when the vehicle is in motion, to reduce the risk of sliding under the lap belt. If the seat is too reclined during an accident, the lap belt may slide past the hips and apply restraint forces directly to the abdomen or your neck may contact the shoulder belt, increasing the risk of death or serious injury.
- 1 Take care when adjusting the seat position to ensure that other passengers are not injured by the moving seat.
- 1 Do not put your hands under the seat or near the moving parts to avoid injury. Fingers or hands may become jammed in the seat mechanism.

SRS airbags

The SRS airbags inflate when the vehicle is subjected to certain types of severe impacts that may cause significant injury to the occupants. They work together with the seat belts to help reduce the risk of death or serious injury.

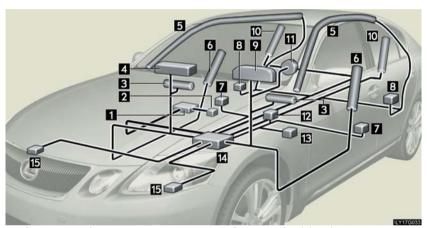


- ► Front airbags
- 1 Driver airbag/front passenger airbag
  Can help protect the head and chest of the driver and front passenger from impact with interior components.
- Knee airbag
  Can help provide driver and front passenger protection.
- ► Side and curtain shield airbags
- Front side airbag/rear side airbag (rear side airbags are optional)

  Can help protect the torso of the front occupants and rear outboard occupants.

4 Curtain shield airbag Can help protect primarily the head of front occupants and rear outboard occupants.

## Airbag system components



- Occupant detection sensor
- Front passenger's seat belt SRS warning light buckle switch
- Knee airbag
- 4 Front passenger airbag
- 5 Curtain shield airbag
- 6 Front side airbag
- ☑ Side and curtain shield airbag ☑ Front airbag sensor sensor

- 8 Curtain shield airbag sensor
- Rear side airbag (if equipped)
- 11 Driver airbag
- Driver's seat belt buckle switch
- Driver's seat position sensor
- Airbag sensor assembly

The main SRS airbag system components are shown above. The SRS airbag system is controlled by the airbag sensor assembly. The airbag sensor assembly consists of a safing sensor and an airbag sensor.

In certain types of severe frontal or side impacts, the SRS airbag system triggers the airbag inflators. A chemical reaction in the inflators quickly fills the airbags with non-toxic gas to help restrain the motion of the occupants.

#### n If the SRS airbags deploy (inflate)

- 1 Bruising and slight abrasions may result from contact with a deploying (inflating) SRS airbag.
- 1 A loud noise and white powder will be emitted.
- 1 Parts of the airbag module (steering wheel hub, airbag cover and inflator) as well as the front seats, and parts of the front pillar and roof side rail, may be hot for several minutes. The airbag itself may also be hot.
- 1 The windshield may crack.

#### n Operating conditions (front airbags)

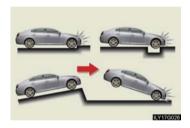
- 1 The SRS front airbags will deploy if the severity of the frontal impact is above the designed threshold level, comparable to an approximate 15 mph (25 km/h) collision in the U.S.A. and 18 mph (30 km/h) collision in Canada when the vehicle impacts straight into a fixed barrier that does not move or deform.
  - However, this threshold velocity will be considerably higher if the vehicle strikes an object, such as a parked vehicle or sign pole, which can move or deform on impact, or if the vehicle is involved in an underride collision (e.g. a collision in which the front of the vehicle "underrides", or goes under, the bed of a truck, etc.).
- 1 It is possible that in some collisions where the forward deceleration of the vehicle is very close to the designed threshold level, the SRS front airbags and the seat belt pretensioners may not activate together.
- 1 The SRS front passenger airbag will not activate, if there is not passenger sitting in the front passenger seat. However, the front passenger airbag may deploy, if luggage is put in the seat or the seat belt is buckled up, regardless of the presence of an occupant in the seat.

#### n Operating conditions (side and curtain shield airbags)

- 1 The SRS side airbags and curtain shield airbags are designed to inflate when the passenger compartment is subjected to a severe impact from the side.
- 1 The SRS front side airbag on the passenger seat will not activate if there is no passenger sitting in the front passenger seat. However, the front side airbag on the passenger seat may deploy, if luggage is put in the seat or the seat belt is buckled up, regardless of the presence of an occupant in the seat.

# n Conditions under which the SRS airbags may deploy (inflate), other than a collision

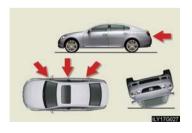
The SRS front airbags may also deploy if a serious impact occurs to the underside of your vehicle. Some examples are shown in the illustration.



- 1 Hitting a curb, edge of pavement or hard surface
- 1 Falling into or jumping over a deep hole
- 1 Landing hard or vehicle falling

#### ${ m n}\,$ Types of collisions that may not deploy the SRS airbag (front airbags)

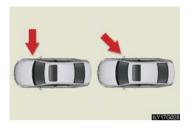
The SRS front airbags are generally not designed to inflate if the vehicle is involved in a side or rear collision, if it rolls over, or if it is involved in a low-speed frontal collision. But, whenever a collision of any type causes sufficient forward deceleration of the vehicle, deployment of the SRS front airbags may occur.



- Collision from the side
- 1 Collision from the rear
- 1 Vehicle rollover

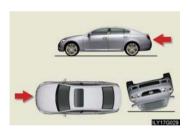
### Types of collisions that may not deploy the SRS airbag (side and curtain shield airbags)

The SRS side airbag and curtain shield airbag system may not activate if the vehicle is subjected to a collision from the side at certain angles, or a collision to the side of the vehicle body other than the passenger compartment.



- 1 Collision from the side to the vehicle body other than the passenger compartment
- 1 Collision from the side at an angle

The SRS side airbags and curtain shield airbags are not generally designed to inflate if the vehicle is involved in a frontal or rear collision, if it rolls over, or if it is involved in a low-speed side collision.

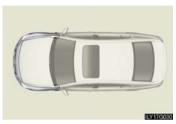


- Collision from the front
- Collision from the rear
- Vehicle rollover

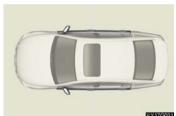
#### n When to contact your Lexus dealer

In the following cases, contact your Lexus dealer as soon as possible. Do not disconnect the 12 volt battery cables before contacting your Lexus dealer.

1 Any of the SRS airbags have been inflated.



1 The front of the vehicle is damaged or deformed, or was involved in an accident that was not severe enough to cause the SRS airbags to inflate.



1 A portion of the doors is damaged or deformed, or the vehicle was involved in an accident that was not severe enough to cause the SRS side airbags and curtain shield airbags to inflate.



1 The pad section of the steering wheel, front passenger airbag cover or lower portion of the instrument panel is scratched, cracked, or otherwise damaged.



- 1 The surface of the seats with the side airbag is scratched, cracked, or otherwise damaged.
- 1 The portion of the front pillars, rear pillars or roof side rail garnishes (padding) containing the curtain shield airbags is scratched, cracked, or otherwise damaged.

#### n SRS airbag precautions

Observe the following precautions regarding the airbags. Failure to do so may cause death or serious injury.

- 1 The driver and all passengers in the vehicle must wear their seat belts properly. The SRS airbags are supplemental devices to be used with the seat belts.
- 1 The SRS driver airbag deploys with considerable force, and can cause death or serious injury especially if the driver is very close to the airbag. The National Highway Traffic Safety Administration ("NHTSA") advises:
  - Since the risk zone for driver airbag is the first 2 3 in. (50 75 mm) of inflation, placing yourself 10 in. (250 mm) from your driver airbag provides you with a clear margin of safety. This distance is measured from the center of the steering wheel to your breastbone. If you sit less than 10 in. (250 mm) away now, you can change your driving position in several ways:
  - Move your seat to the rear as far as you can while still reaching the pedals comfortably.
  - Slightly recline the back of the seat. Although vehicle designs vary, many drivers can achieve the 10 in. (250 mm) distance, even with the driver seat all the way forward, simply by reclining the back of the seat somewhat. If reclining the back of your seat makes it hard to see the road, raise yourself by using a firm, non-slippery cushion, or raise the seat if your vehicle has that feature.
  - If your steering wheel is adjustable, tilt it downward. This points the airbag toward your chest instead of your head and neck.

The seat should be adjusted as recommended by NHTSA above, while still maintaining control of the foot pedals, steering wheel, and your view of the instrument panel controls.

### **CAUTION**

#### n SRS airbag precautions



- I If the seat belt extender has been connected to the driver's seat belt buckle but the seat belt extender has not also been fastened to the latch plate of the driver's seat belt, the SRS driver's airbag system will judge that the driver is wearing the seat belt even though the seat belt has not been connected. In this case, the driver's airbag may not activate correctly in a collision. resulting in death or serious injury in the event of collision. Be sure to wear the seat belt with the seat belt extender.
- 1 The SRS front passenger airbag also deploys with considerable force, and can cause death or serious injury especially if the front passenger is very close to the airbag. The front passenger seat should be as far from the airbag as possible with the seatback adjusted, so the front passenger sits upright.
- 1 Improperly seated and/or restrained infants and children can be killed or seriously injured by a deploying airbag. An infant or child who is too small to use a seat belt should be properly secured using a child restraint system. Lexus strongly recommends that all infants and children be placed in the rear seats of the vehicle and properly restrained. The rear seats are the safest for infants and children.  $(\to P. 80)$

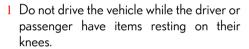
#### n SRS airbag precautions



 Do not sit on the edge of the seat or lean against the dashboard.



1 Do not allow a child to stand in front of the SRS front passenger airbag unit or sit on the knees of a front passenger while the vehicle is moving.





1 Do not lean against the door, the roof side rail or the front, side and rear pillars.



1 Do not allow anyone to kneel on the front passenger seat toward the door or put their head or hands outside the vehicle.

#### n SRS airbag precautions





- 1 Do not attach anything to or lean anything against areas such as the dashboard, steering wheel pad or lower portion of the instrument panel. These items can become projectiles when SRS driver, front passenger and knee airbags deploy.
- 1 Do not attach anything to areas such as the door, windshield glass, side door glass, front and rear pillars, roof side rail or assist arip.
- 1 Do not hang coat hangers or other hard objects on the coat hooks. All of these items could become projectiles and seriously injure or kill you, should the SRS curtain shield airbag deploy.
- 1 If the vinyl cover is put on the area where the SRS knee airbag will deploy, be sure to remove it.
- 1 Do not use seat accessories which cover the parts where the SRS side airbags inflate as they may interfere with inflation of the airbags.
- 1 Do not strike or apply significant levels of force to the area of the SRS airbag components shown on P. 70. Doing so can cause the SRS airbags to malfunction.
- 1 Do not touch any of the component parts immediately after the SRS airbags have deployed (inflated) as they may be hot.
- 1 If breathing becomes difficult after the SRS airbag has deployed, open a door or window to allow fresh air in, or leave the vehicle if it is safe to do so. Wash off any residue as soon as possible to prevent skin irritation.
- 1 If the areas where the SRS airbags are stored, such as the steering wheel pad and front pillar garnish, are damaged or cracked, have them replaced by your Lexus dealer.

#### n Modification and disposal of SRS airbag system components

Do not dispose of your vehicle or perform any of the following modifications without consulting your Lexus dealer. The SRS airbag may malfunction or deploy (inflate) accidentally, causing death or serious injury.

- 1 Installation, removal, disassembly and repair of the SRS airbags
- 1 Repairs, modifications, removal or replacement of the steering wheel, instrument panel, dashboard, seats or seat upholstery, front, side and rear pillars or roof side rail
- Repairs or modifications of the front fender, front bumper, or side of the occupant compartment
- Installation of snow plows, winches, etc. to the front grille (bull bars, kangaroo bar etc.)
- 1 Modifications to the vehicle's suspension system
- 1 Installation of electronic devices such as mobile two-way radios or CD players

## **Child restraint systems**

A child restraint system for a small child or baby must itself be properly restrained on the seat with the lap portion of the lap/shoulder belt.

The laws of all 50 states of the U.S.A. and Canada now require the use of child restraint systems.

#### Points to remember

Studies have shown that installing a child restraint on a rear seat is much safer than installing one to the front passenger seat.

- 1 Choose a child restraint system appropriate to the age and size of the child.
- 1 For installation details, follow the instructions provided with the child restraint system.

General installation instructions are provided in this manual.  $(\rightarrow P. 83)$ 

## Types of child restraints

Child restraint systems are classified into the following 3 types according to the age and size of the child.

#### ▶ Infant seat



### ► Convertible seat



### ▶ Booster seat



#### $\,n\,$ When the child restraint system is not in use

Leave the child restraint system properly secured on the seat. Do not store the restraint loosely on a passenger seat or in the trunk.

## $_{ m 11}$ Selecting an appropriate child restraint system

Get an appropriate child restraint system for the child. If a child is too large for a child restraint system, sit the child on a rear seat and use the vehicle's seat belt.  $(\rightarrow P.42)$ 

## **CAUTION**

#### n Child restraint precautions

- 1 For effective protection in automobile accidents and sudden stops, a child must be properly restrained, using a seat belt or child restraint system depending on the age and size of the child. Holding a child in your arms is not a substitute for a child restraint system. In an accident, the child can be crushed against the windshield, or between you and the vehicle's interior.
- Lexus strongly urges the use of a proper child restraint system that conforms to the size of the child, installed on the rear seat. According to accident statistics, the child is safer when properly restrained in the rear seat than in the front seat.
- 1 Never install a rear-facing child restraint system on the front passenger seat. In the event of an accident, the force of the rapid inflation of the front passenger airbag can cause death or serious injury to the child if the rear-facing child restraint system is installed on the front passenger seat.
- 1 A forward-facing child restraint system should allowed to be installed on the front passenger seat only when it is unavoidable. Always move the seat as far back as possible, because the front passenger airbag could inflate with considerable speed and force. Otherwise, the child may be killed or seriously injured.
- 1 Do not use the seat belt extender when installing a child restraint system on the front or rear passenger seat. If installing a child restraint system with the seat belt extender connected to the seat belt, the seat belt will not securely hold the child restraint system, which could cause death or serious injury to the child or other passengers in the event of collision.
- 1 Do not allow the child to lean his/her head or any part of his/her body against the door or the area of the seat, front pillar or roof side rail from which the side airbags or curtain shield airbags deploy even if the child is seated in the child restraint system. It is dangerous if the side airbags and curtain shield airbags inflate, and the impact could cause death or serious injury to the child.
- 1 Make sure you have complied with all installation instructions provided by the child restraint manufacturer and that the system is properly secured. If it is not secured properly, it may cause death or serious injury to the child in the event of a sudden stop or accident.

## **Installing child restraints**

Follow the child restraint system manufacturer's instructions. Firmly secure child restraints to the outboard rear seats using a seat belt or a child restraint lower anchor belt. Attach the top strap when installing a child restraint.

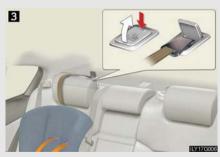


Seat belts equipped with a child restraint locking mechanism (ALR/ELR belts except driver's seat belt) (→P. 44)



Child restraint lower anchorages

Lower anchorages are provided for the outboard rear seats. (Buttons displaying the location of the anchorages are attached to the seats.)

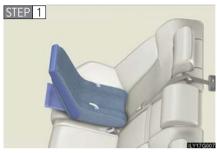


Anchor bracket (for top strap)

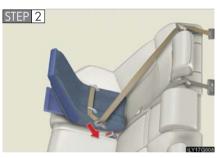
Anchor brackets are provided for all rear seats.

## Installing child restraints using a seat belt (child restraint lock function belt)

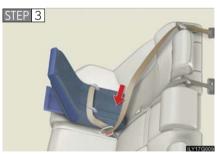
### n Rear facing child seat — Infant/convertible



Place the child seat on the rear seat facing the rear of the vehicle.



Run the seat belt through the infant seat and insert the plate into the buckle. Make sure that the belt is not twisted.



Fully extend the shoulder belt and then allow it to retract slightly in order to activate the ALR lock mode.

Lock mode allows the seat belt to retract only.



While pushing the child seat down into the rear seat, allow the shoulder belt to retract until the child seat is securely in place.

After the shoulder belt has retracted to a point where there is no slack in the belt, pull the belt to check that it cannot be extended.

## n Forward facing — Convertible child seat



Place the child seat on the seat facing the front of the vehicle.

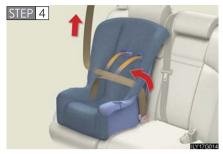


Run the seat belt through the child seat and insert the plate into the buckle. Make sure that the belt is not twisted.



Fully extend the shoulder strap and then allow it to retract slightly into the ALR lock mode.

Lock mode allows the seat belt to retract only.



#### n Booster seat



While pushing the child seat into the rear seat, allow the shoulder belt to retract until the child seat is securely in place.

After the shoulder belt has retracted to a point where there is no slack in the belt, pull the belt to check that it cannot be extended.

Place the child seat on the seat facing the front of the vehicle.



Sit the child in the child seat. Fit the seat belt to the child seat according to the manufacturer's instructions and insert the plate into the buckle. Make sure that the belt is not twisted.

Check that the shoulder belt is correctly positioned over the child's shoulder, and that the lap belt is as low as possible.  $(\rightarrow P. 42)$ 

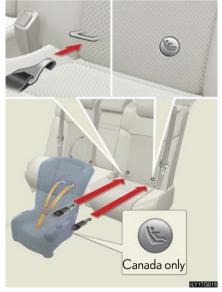
## Removing a child restraint installed with a seat belt



Push the buckle release button and fully retract the seat belt.

## Installation with child restraint lower anchorages

## ► Type A



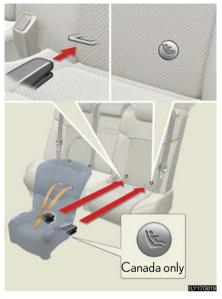
- the seat cushion and seatback slightly.
- STEP 2 Latch the hooks of the lower straps onto the anchorages.

If the child restraint has a top strap, the top strap should be latched onto the anchorage.

For owners in Canada:

The symbol on a child restraint system indicates the presence of a lower anchorage system.

## ► Type B



- STEP 1 Widen the gap between the seat cushion and seatback slightly.
- STEP 2 Latch the buckles onto the anchorages.

If the child restraint has a top strap, the top strap should be latched onto the anchorage.

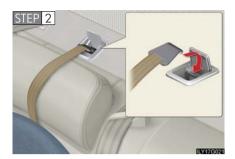
For owners in Canada:

The symbol on a child restraint system indicates the presence of a lower anchorage system.

## Child restraint systems with a top strap



Secure the child restraint using a seat belt or lower anchors, and lock the head restraint in place at the lowest position.



Open the anchor bracket cover, latch the hook onto the anchor bracket and tighten the top strap.

Make sure the top strap is securely latched.

#### n Laws and regulations pertaining to anchorages

Anchorages conform to FMVSS225 or CMVSS210.2.

Child restraint systems conforming to FMVSS213 or CMVSS213 specifications can be used.

This vehicle is designed to conform to the SAE J1819.

## **A** CAUTION

### n When installing a booster seat

Do not fully extend the shoulder belt to prevent the belt from going to ALR lock mode:  $(\rightarrow P. 44)$ 

- 1 ALR mode causes the belt to tighten only which could cause injury or discomfort to the child.
- 1 Do not allow the child to play with the seat belt or the child could be killed or serious injured.

#### n When installing a child restraint system

Follow the directions given in the child restraint system installation manual and fix the child restraint system securely in place.

If the child restraint system is not correctly fixed in place, the child may be injured or even killed in the event of sudden braking or an accident.



I If the driver's seat interferes with the child restraint system and prevents it from being attached correctly, attach the child restraint system to the right-hand rear seat.



- 1 Only put a forward facing or booster child seat on the front seat when unavoidable. When installing a forward facing or booster child restraint on the front passenger seat, move the seat as far back as possible. Failing to do so may result in death or serious injury if the airbags deploy (inflate).
- 1 When a booster seat is installed, always ensure that the shoulder belt is positioned across the center of the child's shoulder. The belt should be kept away from the child's neck, but not so that it could fall off the child's shoulder. Failing to do so may result in death or serious injury in the event of an accident or sudden brakina.
- I Ensure the belt and tab are securely locked and that the seat belt is not twisted.
- 1 Push and pull the child seat in different directions to be sure it is secure.
- 1 Follow all installation instructions provided by the child restraint system manufacturer.

#### n Do not use a seat belt extender

If a seat belt extender is used when installing a child restraint system, the seat belt will not securely hold the child restraint system, which could cause death or serious injury to the child or other passengers in the event of a collision.

#### n To correctly attach a child restraint system to the anchorages

When using the lower anchorages, be sure that there are no foreign objects around the anchorages and that the seat belt is not caught behind the child seat. Make sure the child restraint system is securely attached, or it may cause death or serious injury to the child in the event of a sudden stop or accident.

## 1-8. Safety information